

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-24 (cancelled).

25 (currently amended). A process for the production of acetic acid comprising reacting with carbon monoxide, methanol or a reactive derivative thereof in a liquid reaction composition comprising methyl acetate, a finite concentration of water, acetic acid and a catalyst system, which catalyst system comprises an iridium carbonylation catalyst, methyl iodide co-catalyst, at least one non-hydrohalogenoic acid promoter in an amount sufficient to provide a promotional effect on the carbonylation rate and optionally at least one of ruthenium, osmium, rhenium, zinc, gallium, tungsten, cadmium, mercury and indium.

26 (previously presented). A process according to claim 25 wherein the non-hydrohalogenoic acid is selected from an oxoacid, a superacid, a heteropolyacid and mixtures thereof.

27 (previously presented). A process according to claim 26 wherein the non-hydrohalogenoic acid is an oxoacid.

28 (previously presented). A process according to claim 27 wherein the oxoacid is an oxoacid of the elements of Groups 13 to 17 of the Periodic Table.

29 (previously presented). A process according to claim 27 wherein the oxoacid is selected from H_2SO_4 , HNO_3 , H_3PO_4 and mixtures thereof.

30 (previously presented). A process according to claim 27 wherein the molar ratio of oxoacid anion to iridium is in the range greater than 0 to 0.4 : 1.

31 (previously presented). A process according to claim 29 wherein the molar ratio of oxoacid anion to iridium is greater than 0 to 0.35 : 1.

32 (previously presented). A process according to claim 26 wherein the non-hydrohalogenoic acid is a superacid.

33 (previously presented). A process according to claim 32 wherein the superacid has a non-coordinating anion to iridium.

34 (previously presented). A process according to claim 32 wherein the superacid is a superacid having an anion selected from BF_4^- , PF_6^- , $(\text{CF}_3\text{SO}_2)_2\text{N}^-$, $\text{CBH}_6\text{Br}_6^-$, CF_3SO_3^- , SbF_6^- , FSO_3^- and mixtures thereof.

35 (previously presented). A process according to claim 32 wherein the superacid is selected from HBF_4 , HPF_6 , $(\text{CF}_3\text{SO}_2)_2\text{NH}$, HCBH_6Br_6 and mixtures thereof.

36 (previously presented). A process according to claim 32 wherein the molar ratio of the superacid anion to iridium is in the range greater than 0 to 2.5 : 1.

37 (previously presented). A process according to claim 36 wherein the molar ratio of the superacid anion to iridium is in the range greater than 0 to 1 : 1.

38 (previously presented). A process according to claim 26 wherein the non-hydrohalogenoic acid is a heteropolyacid.

39 (previously presented). A process according to claim 38 wherein the heteropolyacid comprises at least one of molybdenum and tungsten as peripheral atoms.

40 (previously presented). A process according to claim 39 wherein the heteropolyacid is selected from 12-tungstophosphoric acid, 12-molybdophosphoric acid, 12-tungstosilicic acid, 12-molybdosilicic acid and mixtures thereof.

41 (previously presented). A process according to claim 38 wherein the molar ratio of the heteropolyacid anion to iridium is in the range greater than 0 to 5 : 1.

42 (previously presented). A process according to claim 41 wherein the molar ratio of the heteropolyacid anion to iridium is in the range greater than 1 to 4 : 1.

43 (previously presented). A process according to claim 25 wherein the catalyst comprises at least one of ruthenium, osmium, rhenium, zinc, gallium, tungsten, cadmium, mercury and indium.

44 (previously presented). A process according to claim 43 wherein the catalyst comprises at least one of ruthenium, osmium, rhenium and indium.

45 (canceled).

46 (previously presented). A process according to claim 25 wherein the concentration of methyl acetate in the liquid reaction composition is in the range 1 to 70% by weight.

47 (previously presented). A process according to claim 46 wherein the methyl acetate concentration is in the range 2 to 50% by weight.

48 (previously presented). A process according to claim 25 wherein the concentration of water in the liquid reaction composition is in the range 1 to 15% by weight.

49 (previously presented). A process according to claim 48 wherein the concentration of water is in the range 1 to 10% by weight.

50 (previously presented). A process according to claim 25 wherein the process is carried out as a continuous process.